



## The Snack Shack

Americans seem to love the beach! When the weather is warm, people flock to the beach. Some people bring coolers packed with food and drinks. Others prefer to take advantage of snack bars and shops set up along the beach.

Some beachside communities have built long wooden walkways, or boardwalks, to make it easier for beachgoers to walk to the snack bars and stores. How easy do you find walking in the sand? Think about this during the Mathematical Modeling in 3 Acts lesson.

### ACT 1 Identify the Problem

1. What is the first question that comes to mind after watching the video?
2. Write down the main question you will answer about what you saw in the video.
3. Make an initial conjecture that answers this main question.
4. Explain how you arrived at your conjecture.
5. What information will be useful to know to answer the main question? How can you get it? How will you use that information?

### ACT 2 Develop a Model

6. Use the math that you have learned in this Topic to refine your conjecture.

### ACT 3 Interpret the Results

7. Did your refined conjecture match the actual answer exactly? If not, what might explain the difference?